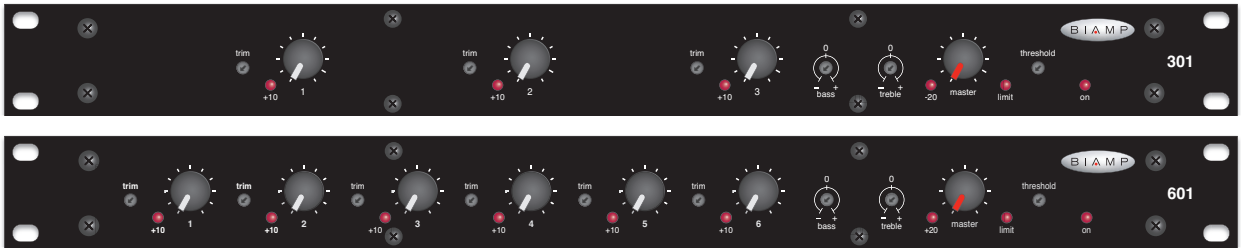
BIAMP®

RoHS Compliant EU 2002/95/EC

301 & 601
Mic/Line Mixers



The 301 & 601 are single rack space, three input & six input mic/line mixers. Each input channel uses a differentially balanced, discrete transistor mic/line preamplifier for low noise and low distortion performance. Inputs are provided to accept signals from microphones and/or line level devices. Special features, including limiters and remote level control, make the 301 & 601 extremely versatile. 301 & 601 mixers are dependable, easy to install, simple to operate, and are covered by Biamp Systems' five-year warranty.

FEATURES

- three electronic balanced mic/line input channels (301)
- six electronic balanced mic/line input channels (601)
- 30db rear panel Pad switch on each input channel
- 40dB screwdriver-adjust Trim on each input channel
- +10dB Peak LED indicator on each input channel
- rotary level control on each input channel
- auto-muting of one channel for "talk-over" applications
- +24 volt Phantom Power assign switch on each input
- electronic balanced main output with rotary level control
- remote control of mail level from up to 2000 feet away
- main patch insert point for external processing devices
- main stacking input accepts signals from other mixers
- screwdriver-adjust tone controls & limiter on main output
- -20dB Signal Present LED indicator for main output
- all input/output/control on plug-in barrier strip connectors
- **RoHS** compliance and **AES** grounding practices
- **CE** marked and **UL** listed power source
- covered by Biamp Systems' five-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The mixer shall have either three or six differentially balanced input channels utilizing discrete transistor preamplifier circuitry. Inputs shall accept microphone or line level signals. Each input shall include a screwdriver adjustable trim control with 40dB of range, a 30dB pad switch, a +10dB (peak) indicator, and a rotary level control. Automatic muting of the last input, via signal present in any or all of the other inputs, shall be assignable by rear panel DIP switches. Phantom Power shall be assignable to the individual inputs, via rear panel switches. Phantom Power shall be +24 Volts, switch selectable on each input.

The master section shall include an electronically balanced main output, a rotary level control, a signal present indicator, screwdriver adjustable treble and bass equalization, a limiter with screwdriver adjustable threshold & indicator, remote control of level from up to 2000' away, an electronically balanced stacking input, and a patch insert point for external signal processing. All signal connections shall be on plug-in barrier strip and the mixer shall be rack mountable in a single rack space.

The mixer shall have a Frequency Response of +0/-1dB from 20Hz to 20kHz, THD + Noise of less than .02%, and Equivalent Input Noise of less than -125dBu. Power Consumption shall be less than 7 watts. Dimensions shall be 1.75" (H) x 19" (W) x 7" (D). Weight shall be 6 lbs. Warranty coverage shall be five years. The mixer shall be CE marked, with a UL / C-UL listed power source, and shall incorporate AES48-2005 Grounding & EMC practices. The mixer shall be compliant with EU Directive 2002/95/EC, the RoHS directive.

The three input mixer shall be a BIAMP 301 Mic/Line Mixer.

The six input mixer shall be a BIAMP 601 Mic/Line Mixer.

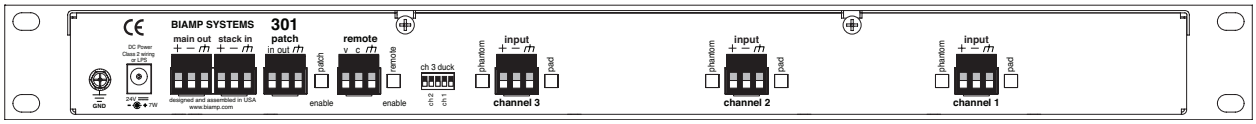
BIAMP®

301 & 601 SPECIFICATIONS

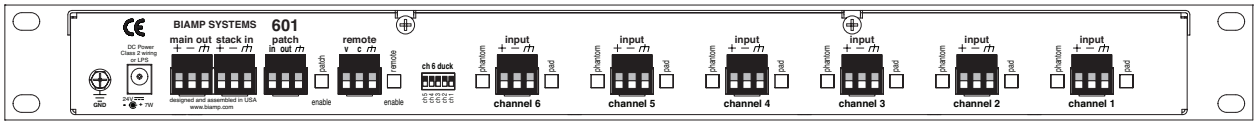
Frequency Response (20Hz~20kHz @ +4dBu):	+0/-1dB
THD+Noise (20Hz~20kHz @ +4dBu):	< 0.02%
Equivalent Input Noise (20Hz~20kHz, 150Ω term.):	-125dBu
Output Noise (20Hz~20kHz):	
master level control down	< -86dB
master level & one channel at nominal	< -78dB
Maximum Gain:	
mic input to main output	78dB
main patch to main output	16dB
main stack to main output	10dB
Crosstalk (channel-to-channel @ 1kHz):	-60dB
Output Impedance:	
main output (balanced)	200 ohms
main patch (unbalanced)	100 ohms
Maximum Output:	
main patch	+18dBu
main output	+24dBu
Output Limiter:	
atack time	1~2 mS (program dependent)
release time	100~500 mS (program dependent)
threshold range	-4dBu ~ +24dBu
Output Tone Controls:	
Bass & Treble	±10dB @ 100Hz & 10kHz

Remote Control Attenuation (0~+10VDC):	-80dB ~ 0dB
Input Trim Control Range:	50dB
Input Pad Switch Attenuation:	30dB
Input Impedance:	
mic/line inputs (balanced)	2.7k ohms
main patch (unbalanced)	> 7k ohms
main stack (balanced)	30k ohms
Maximum Input:	
mic/line input	+30dBu
main patch	+30dBu
main stack	+24dBu
Power Requirements:	115/230VAC 50/60Hz
Power Consumption:	< 7 watts
Dimensions:	
height (1 rack space)	1.75 inches (44mm)
width	19 inches (483mm)
depth	7 inches (178mm)
Weight:	6 lbs. (2.72kg)
Compliance:	AES48-2005 Grounding & EMC practices
	EU Directive 2002/95/EC, RoHS directive
	CE marked
	UL listed power source

301 REAR PANEL DIAGRAM



601 REAR PANEL DIAGRAM



601 BLOCK DIAGRAM